

lateral border parallel at humeri, converging and barely sinuate anteriorly; hind border almost straight. Fore disc with 4(2+2) high, granulate ridges; hind disc granulate; interlobal depression deep. *Scutellum* shorter than its basal width (male 1:1.30, female 1:1.42); lateral borders thinly carinate and slightly sinuate on apical half; tip rounded; disc with a thin median carina, areas laterad of latter granulate. *Hemelytra* reaching beyond fore border of tergum VII ( $\delta$ ), or reaching hind border of tergum VI ( $\text{♀}$ ); apical angle of corium blunt, apical border convex, rounded. *Abdomen* ovate, longer than its maximum width across segment IV (male 1.33:1, female 1.41:1); connexivum wide and slightly raised laterally; posteroexterior angles of the connexiva II to VI slightly protruding, blunt; those of VII produced backward as rounded lobes, reaching  $\frac{1}{2}$  of paratergites ( $\delta$ ), or rounded, reaching  $\frac{1}{2}$  of tergum IX ( $\text{♀}$ ). Paratergites ( $\delta$ ) thin, clavate, reaching apical  $\frac{1}{3}$  of hypopygium; the latter cordate, with a thin median ridge, slightly shorter than disc of hypopygium. Paratergites ( $\text{♀}$ ) large, rounded, reaching apical  $\frac{1}{4}$  of slightly tricuspidate segment IX. Spiracles II to VII ventral, placed far from margin, VIII also ventral, but placed closer to margin and not visible from above. *Legs* unarmed. *Color* dark ferrugineous, connexivum

and venter ferrugineous. *Size*—total length: male 7.78, female 8.67 mm; width of pronotum: male 3.56, female 2.83 mm; width of abdomen: male 3.16, female 3.56 mm.

*Diagnosis:* *Mezira tropicalis*, n. sp. is closely related to *M. mexicana* Kormilev, (Proc. United States Nat. Mus., 119:245-258, 1964), from Vera Cruz, Mexico, but is larger, with the anterior process of the head longer and more slender; antennal segment III relatively longer, almost twice as long as IV; and paratergites ( $\text{♀}$ ) longer, reaching to the apical  $\frac{1}{4}$  of segment IX.

*Holotype:* Male, Mexico, Jalisco, 13 mi W Atenquique, 7800 ft, 13 July 1966 (J. R. Dixon and W. R. Heyer) LACM. *Allotype:* Female, 1 female paratype and 5 nymphs, same data as holotype.

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### A NEW SPECIES OF AMBUSH BUG FROM ARIZONA (HEMIPTERA: PHYMATIDAE)

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ABSTRACT: A new species of macrocephaline ambush bug from Arizona is described.

The ambush bugs are represented in the continental United States by two subfamilies, Phymatinae and Macrocephalinae. The first is common throughout the country, but the second is rather rare, being distributed mainly in the south and southwest, although *Macrocephalus prehensilis* (Fabricius), 1803, has been recorded as far north as Kentucky and Kansas (Evans, Ann. Ent. Soc. America, 24:711-736, 1931). While examining specimens of the latter subfamily in the collection of the Natural History Museum of Los Angeles County (LACM) and in a lot sent to me by T. Halstead, I found a few specimens of

an undescribed *Macrocephalus*, collected in Arizona.

In the description all measurements are given in millimeters. The first figure in a ratio represents the length and the second the width of the measured part. The length of the abdomen was measured from the anteroexterior angles of connexivum II to the tip of abdomen.

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SUBFAMILY MACROCEPHALINAE  
GENUS *Macrocephalus* SWEDERUS, 1787

*Macrocephalus similis*, new species

Figure 1

*Description: Female.* Elongate ovate; head, fore lobe of pronotum and corium, finely granulate; connexiva II roughly granulate. *Head* almost twice as long as its width across eyes (1.60:0.92); antecular portion narrower than postocular (0.64:0.80); ocelli placed nearer hind border of head than eyes (0.24:0.28); upper lobe of genae rounded, lower angular; bucculae evenly rounded and granulate on border; lateral borders of labial groove also granulate. Antennae almost as long as head (1.56:1.60); antennal segment I subtriangular, flattened laterally; II almost globose, III evenly enlarged toward tip, IV fusiform; relative length and width of antennal segments I to IV: 0.40:0.32 — 0.24:0.20 — 0.28:0.16 — 0.64:0.36. Labium reaching middle of prosternal cavity. *Pronotum* shorter than its maximum width across humeri (2.28:3.04); fore lobe narrower than hind lobe (1.52:3.04). Anterior angles dentiform, acute, directed forward; anterior border deeply sinuate; anterolateral-anterior borders slightly convex, diverging backward; interlobal notch sinuate; anterolateral-posterior borders convex, rounded; lateral angles incised as in *M. cimicoides* Swederus, 1787; postero-lateral borders firstly convex, then sinuate; hind border convex in middle. Fore disc convex, finely granulate, more densely granulate along lateral borders; pronotal pit elongate. Hind disc roughly punctured, punctures forming a net-like surface and are larger anteriorly and laterally. Pronotal carinae short, stout anteriorly, diverging, tapering and evanescent posteriorly, without any knob or ridge anteriorly. *Scutellum* twice as long as its maximum width (1.10:0.55), with a thin median carina, which is enlarged on basal 1/7. Disc roughly punctured at base laterally, finely punctured elsewhere on disc, the basal portion moderately inflated and with a weak, ivory-like elevation in the form of a 3-pronged spear-head on basal half medially, more distinct in the males. *Hemelytra* reaching tip of abdomen; corium finely granulate, granules arranged in groups. *Abdomen* cordate, slightly longer than its maximum width across segment III (4.12:4.00); posteroexterior angles of connexiva barely protruding; connexiva II covered with a rough and dense granulation; other connexiva sparsely and finely granulate along exterior border. *Legs* with fore coxae cylindrical, without knob or tooth, but roughly granulate inferiorly. Fore femora longer than wide (2.16:0.88), convex exteriorly and with a row of rough, setigerous granules on upper side. Fore tibiae without tarsi. Middle and hind femora with rough, setigerous granules on upper and lower sides, with smaller granules laterally; middle and hind tibiae densely granulate. *Color*

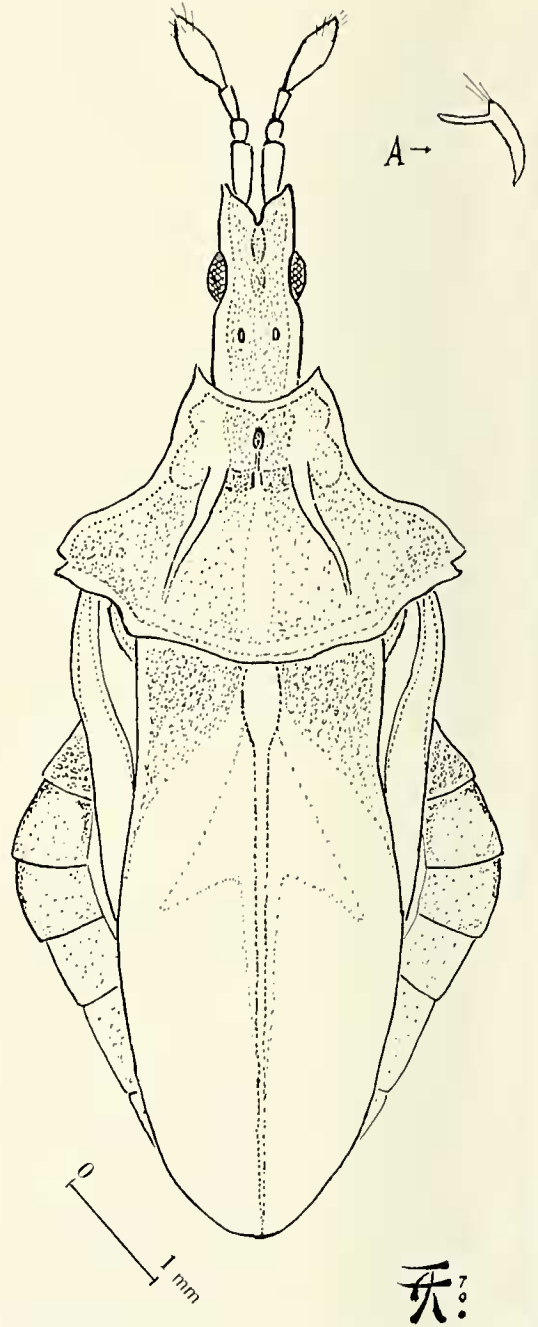


Figure 1. *Macrocephalus similis*, n.sp., holotype (female), dorsal aspect; A—paratype (male), right paramere.

grayish brown; head on upper side medially, fore lobe of pronotum in middle, and exterior borders of connexiva III and IV, black or blackish; rest of fore lobe of pronotum and connexiva III and IV, reddish brown; antennae, pronotal carinae, scutellar carina

and inflated portion of disc, and connexiva II, ochraceous or slightly brownish; anterolateral portions of scutellum (roughly punctured) brown; ventral side of body ochraceous, brownish on fore femora, coxae, middle and hind femora, and venter laterally and posteriorly; middle tarsi black, hind tarsi greenish-yellow. *Size*—total length 8.16 mm; width of pronotum 3.00 mm; width of abdomen 4.00 mm.

*Male*. Smaller and more slender than female, more densely granulate and with color generally darker; upper surface of head black; antennae, pronotum and scutellum, with exception of a three-pronged, spear-shaped ivory spot, black mottled somewhat with yellow; connexiva III, IV and most of V, black; ventral side of the body yellow with some brown stripes on fore femora and venter laterally; reddish brown near lateral angles of venter. One male is colored as the females.

*Measurements*: Head 1.60:0.90; relative length and width of antennal segments I to IV: 0.48:0.22 — 0.22:0.20 — 0.32:0.20 — 0.80:0.32; pronotum 2.20:3.08, ratio width of fore lobe: width of hind lobe as 1.60:3.08; scutellum 4.20:2.20; abdomen 4.16:3.60 (across segment III); fore femora 2.0:0.9. Paramere is of *Macrocephalus* type.

*Size*: Total length 7.92 mm; width of pronotum 3.08 mm; width of abdomen 3.60 mm.

*Diagnosis*: *Macrocephalus similis*, n.sp. is very similar to *M. barberi* Evans, 1931, from California,

and probably was confused with the latter but may be separated from it by: larger size, pronotal carina without knob or ridge anteriorly, granulation of pronotum and connexivum generally finer and not so dense, head relatively shorter, pronotum relatively longer, and abdomen slightly longer than its maximum width.

*Holotype*: Female. Arizona, Cochise Co., 5 mi W Portal, 25 June 1959 (L. A. Stange) LACM. *Allotype*: Male. Arizona, Santa Cruz Co., Pena Blanca Lake, 22 May 1970 (T. Halstead) LACM.

*Paratypes*: 5 ♂ and 7 ♀, some were collected with the allotype, and others in the same locality on 15 November 1969, T. Halstead coll. Deposited in the Natural History Museum of Los Angeles County and in the collections of Department of Entomology, University of Arizona, Tucson, and of the author.

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### THE ASCIDIANS *STYELA BARNHARTI*, *S. PLICATA*, *S. CLAVA*, AND *S. MONTEREYENSIS* IN CALIFORNIAN WATERS

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**ABSTRACT**: Reexamination of the holotype of *Styela barnharti* Ritter and Forsyth, 1917, shows that it is *Styela plicata* (Lesueur, 1823). The species designated *Styela barnharti* by Van Name (1945) and subsequent authors is *Styela clava* Herdman, 1881, an asiatic form probably introduced into Californian waters in the late 1920's. The latter species is distinct from the native west coast form *Styela montereyensis* (Dall, 1872).

The stalked simple ascidian usually referred to as *Styela barnharti* is common on floats and pilings in protected coastal waters of southern California (Ricketts and Calvin, 1968; MacGinitie and MacGinitie, 1968). In some harbor areas it is found with another stalked form, *Styela montereyensis*; the two are not always easily distinguished, especially when overgrown by hydroid and bryozoan colonies.

Van Name (1945) expressed the opinion that the original description of *S. barnharti* by Ritter and Forsyth (1917) gave "a very poor idea of the size and usual character of the species." and pro-

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